

## **APPENDIX B**

### **TACFIRE-NONTACFIRE COMMUNICATIONS**

#### **1. INTRODUCTION.**

a. The following information provides a framework within which TACFIRE-equipped units and nonTACFIRE-equipped units can communicate based upon their particular situations.

b. Now, and in the future, an FA unit equipped with TACFIRE may be required to operate with one that is not. Described here are general situations and some options by which TACFIRE and nonTACFIRE units can communicate together to optimize their fire support capabilities.

c. The task of providing FA support does not change because a unit is equipped with TACFIRE. But, because of TACFIRE, the equipment, capabilities, procedures, and radio nets used are not identical between TACFIRE and nonTACFIRE units. These differences must be recognized and planned for before the TACFIRE and nonTACFIRE units must operate together. Once developed, the plans and procedures must be practiced.

2. **CONSIDERATIONS.** There are two major factors which must be considered. They are the equipment of the units involved and the missions assigned to the units.

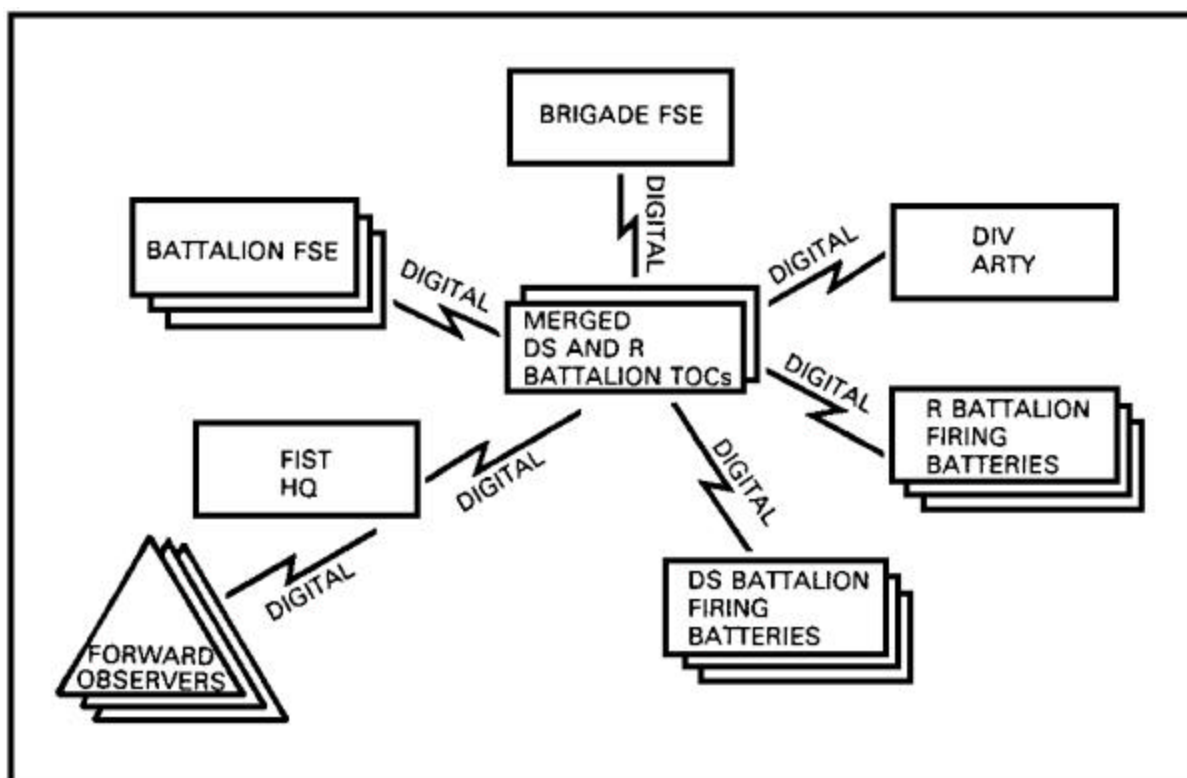
a. All units are assumed to be equipped with DMDs for their forward observers and BCSs for their firing batteries. Therefore, the presence or absence of TACFIRE is a major variable for consideration.

b. The other major variable is the missions assigned to the units involved. The presence or absence of TACFIRE in no way changes any of the inherent responsibilities of the standard tactical mission. However, when TACFIRE and nonTACFIRE units must operate together, the way in which these responsibilities are satisfied may be somewhat different. The methods and procedures of both TACFIRE and nonTACFIRE units will require modifications. The modifications described below are directed toward maximizing the combined effectiveness of the units involved.

#### **3. NONTACFIRE BATTALION.**

a. These arrangements permit the integration of the nonTACFIRE battalion into the digital communications channels of the DS battalion and of the div arty while ensuring a timely flow of information to the GSR battalion. This enhances the responsiveness of the GSR battalion to both the div arty and the DS battalion.

b. NonTACFIRE battalion reinforcing a TACFIRE DS battalion (Figure B-1). The effectiveness of the fire support provided by both battalions will be enhanced by the use of the DS battalion TACFIRE. The following changes are necessary:

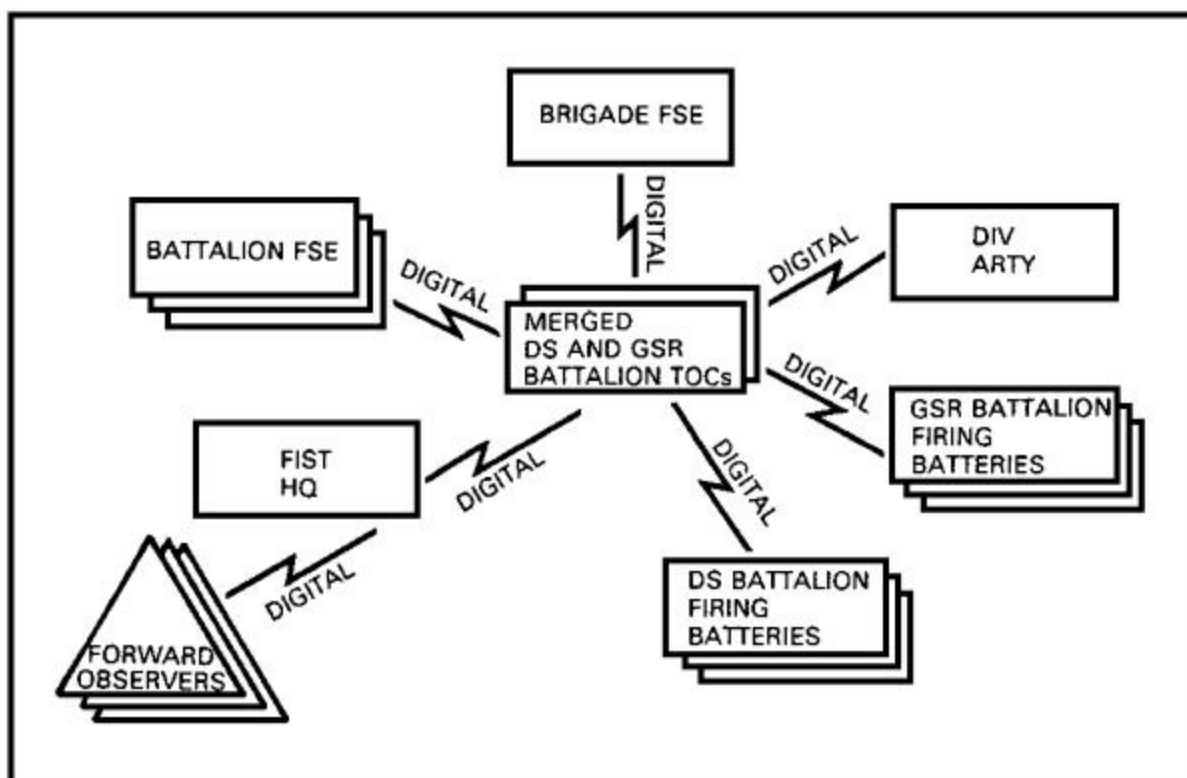


**Figure B-1. NonTACFIRE battalion reinforcing a TACFIRE DS battalion.**

(1) The TOCs of the two battalions are collocated. This eases the exchange of information between the battalions. It may be appropriate to form a battalion group consisting of the DS battalion and its reinforcing battalion. This would achieve unity of command and direction.

(2) The firing batteries of the nonTACFIRE reinforcing battalion are entered into the DS battalion TACFIRE. This permits the reinforcing battalion firing batteries to be considered by the DS battalion TACFIRE. It also provides a digital communications link between the DS battalion TACFIRE and the reinforcing battalion firing batteries with their BCS.

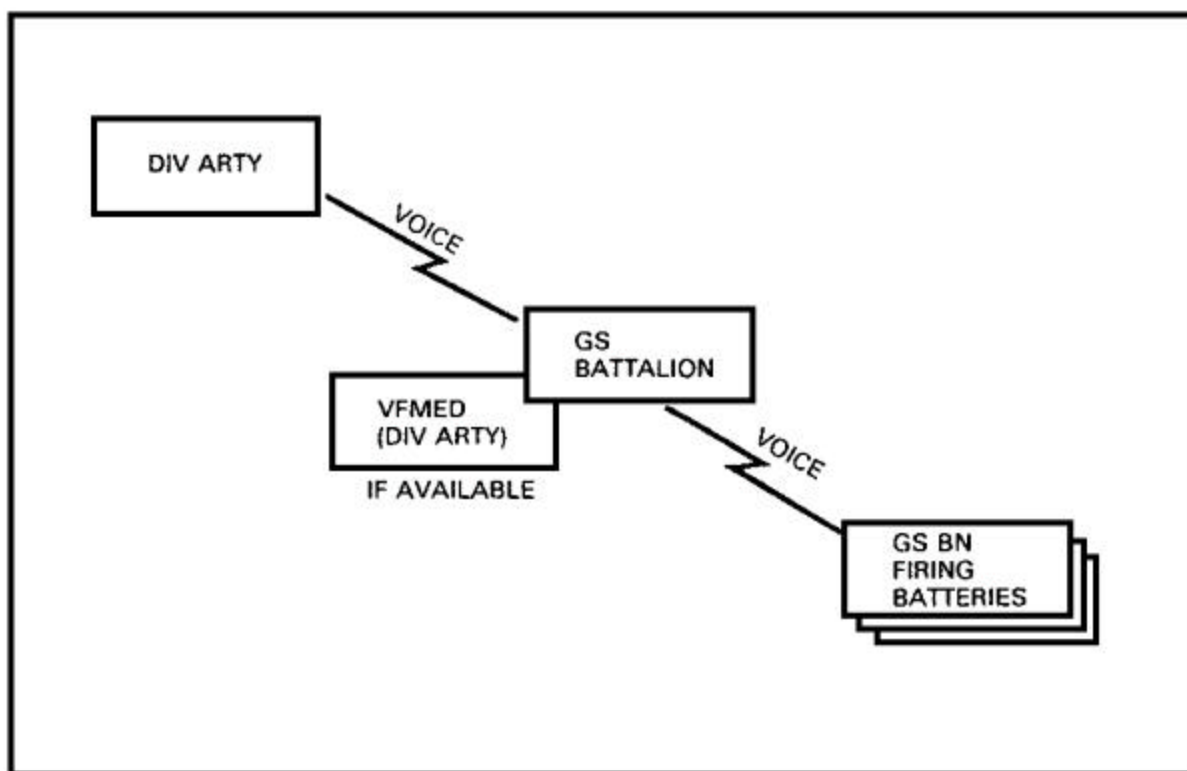
c. NonTACFIRE battalion GSR a TACFIRE battalion (Figure B-2). In this situation, the effectiveness of the reinforcing battalion can be enhanced by integration of some of its elements with those of the DS battalion.



**Figure B-2. NonTACFIRE battalion GSR to a TACFIRE battalion.**

- (1) The firing batteries of the GSR battalion are entered into the TACFIRE of the DS battalion.
- (2) The TOCs of the DS battalion and the GSR battalion are collocated.

d. NonTACFIRE battalion GS to a TACFIRE div arty (Figure B-3). There are no extraordinary arrangements required.



**Figure B-3. NonTACFIRE battalion GS to a TACFIRE div arty.**

(1) The GS battalion must establish liaison with the div arty. This is probably best done by sending the liaison party to the div arty.

(2) If a VFMED and personnel knowledgeable in its operation can be made available, they can be sited in the GS battalion TOC. This would provide a digital communications channel for the GS battalion and would facilitate the flow of information between it and div arty.

4. **TACFIRE BATTALION.** The mission of a TACFIRE battalion reinforcing a nonTACFIRE DS battalion presents some interesting challenges to the commanders and staffs involved. High on the list of problems to be solved is the effective integration of the maneuver battalion and the brigade FSOs into the system of information flow. The two options presented represent the two extremes possible in this situation. Other configurations of organizations and equipment can be implemented and may be desirable depending on the situation. Commanders must, as always, make the best possible use of their resources.

a. Option 1 (Figure B-4). The following observations should be made:

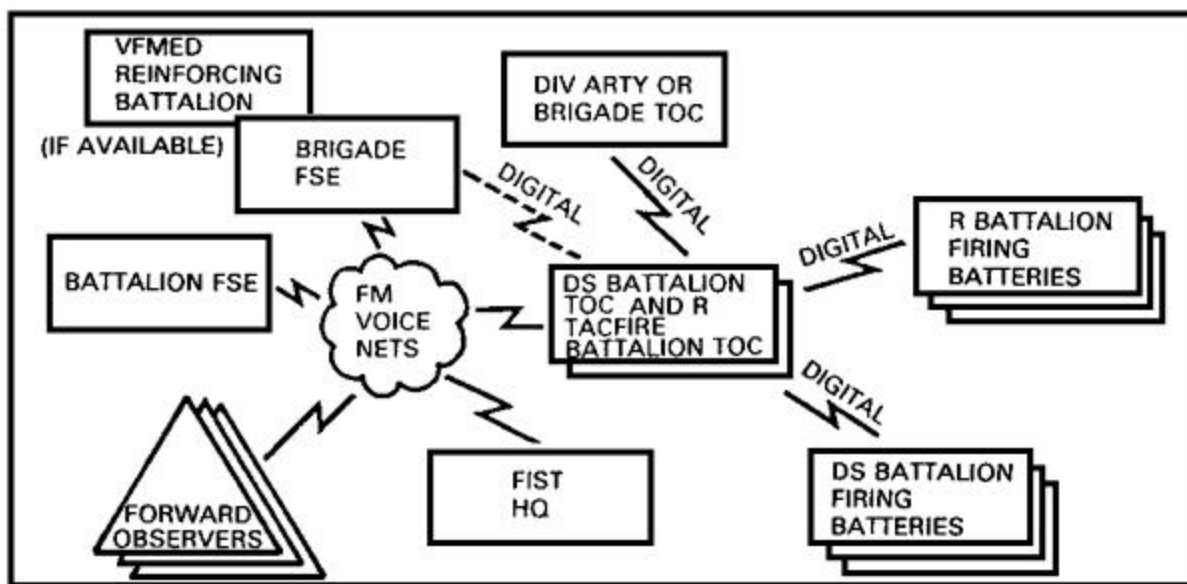
(1) This arrangement makes near maximum use of digital communications channels.

(2) The maneuver battalion and brigade FSOs are fully integrated into the information flow by virtue of the FM voice nets.

(3) A battalion group, consisting of the DS battalion and the reinforcing battalion, may be formed. The TOCs of the two battalions should be collocated.

(4) The firing batteries of the nonTACFIRE DS battalion are entered into the TACFIRE of the reinforcing battalion.

(5) If a VFMED and personnel knowledgeable in its operation can be made available, there are two possible uses for it. It could be sited at the maneuver brigade FSE. This would provide some TACFIRE capability to this element. An alternative use would be to site the VFMED and operations at the div arty TOC and thus provide a digital link to that organization.



**Figure B-4. Option 1--TACFIRE battalion reinforcing a nonTACFIRE battalion.**

b. Option 2 (Figure B-5). This use of assets closely parallels the use of channels in nonTACFIRE operations, as almost all channels are voice. The following observations need to be made:

(1) This option does not make maximum use of the reinforcing battalion TACFIRE.

(2) The TACFIRE battalion must arrange a voice channel to div arty. Otherwise, no changes need to be made because of the TACFIRE and nonTACFIRE interface.

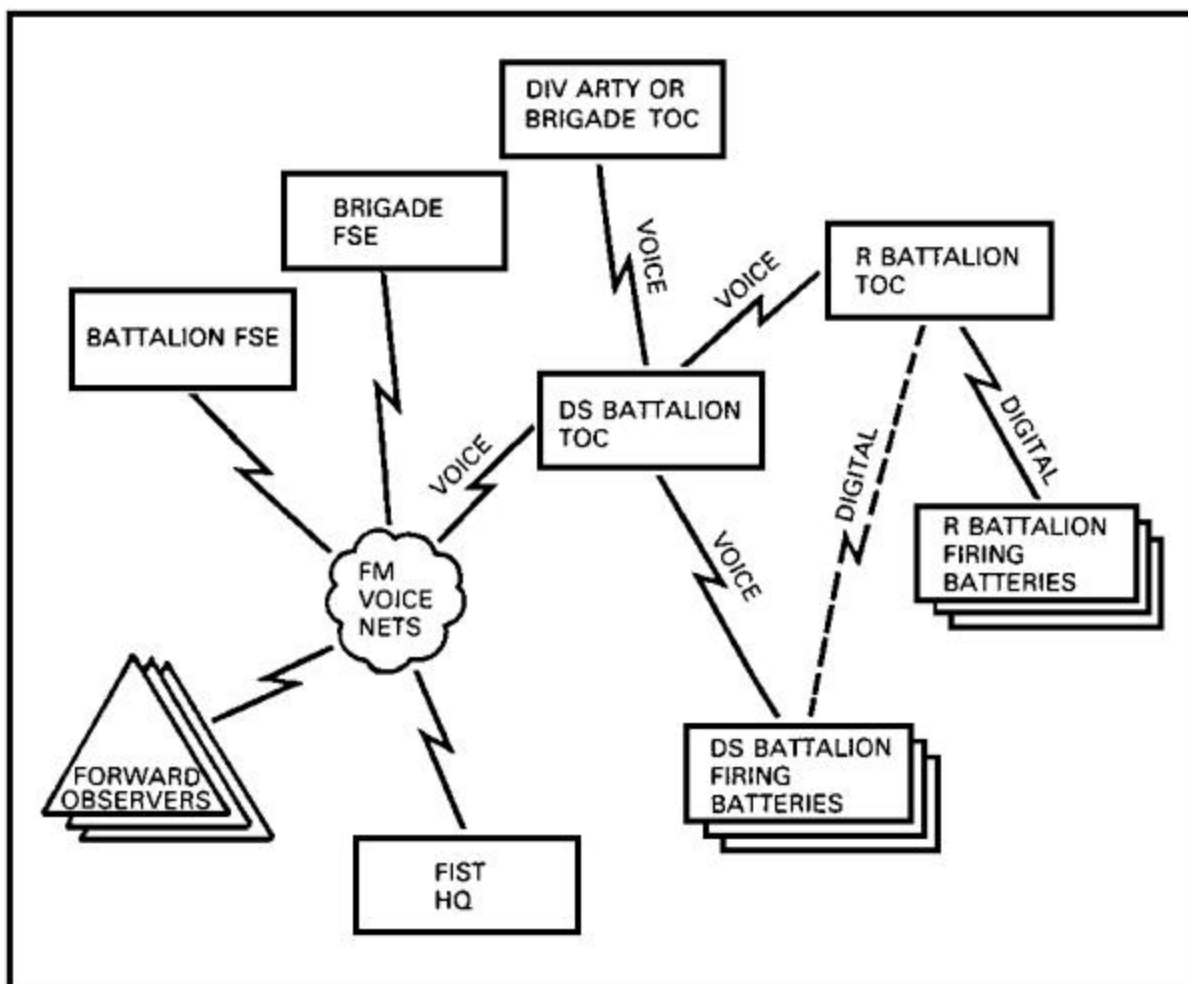


Figure B-5. Option 2--TACFIRE battalion reinforcing a nonTACFIRE battalion.